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In the Claims:

Please amend the claims to read as follows:

1. (Currently Amended) A method for promoting hematopoietic or progenitor cell

engraftment or bone marrow tissue transplantation in a recipient mammal, comprising:

administering to a recipient mammal in need of hematopoietic or progenitor cell

engraftment or bone marrow tissue transplantation a therapeutically effective amount of

allogeneic mesenchymal stem cells thereby promoting hematopoietic or progenitor cell

engraftment and wherein said allogeneic mesenchymal stem or progenitor cells are

obtained from a mammalian donor and wherein a step of MHC matching of said

mammalian donor to a the recipient is not employed prior to the administration of said

allogeneic mesenchymal stem cells to a the mammalian recipient.

2. (Currently Amended) The method of claim 1, wherein said recipient mammal is

a human patient and said mesenchymal stem cells are allogeneic human mesenchymal

stem cells.

3. – 5. (Canceled)

6. (Currently Amended) The method of claim 1, wherein the allogeneic

mesenchymal stem cells are recovered from bone marrow and are administered to the

recipient mammal in a cell preparation which is substantially free of blood cells.

7. (Currently Amended) The method of claim 6, wherein the cell preparation is

administered in conjunction with a carrier.

8. (Currently Amended) The method of claim 7, wherein the allogeneic

mesenchymal stem cells are administered systemically.

2

Seria! No:

10/046,530

Filed:

14 January 2002

9. (Currently Amended) The method of claim 7, wherein the cell preparation is administered intravenously.

10. (Currently Amended) The method of claim 1, wherein the allogeneic mesenchymal stem cells express incorporated genetic material of interest.

11. (Currently Amended) A method for treating a human recipient for promoting muscle tissue growth, comprising:

treating a human recipient in need of muscle tissue growth by administering, by infusion or direct injection, a therapeutically effective amount of allogeneic mesenchymal stem cells to said human recipient, wherein said allogeneic mesenchymal stem cells are obtained from a human donor and wherein a step of MHC matching of said human donor to a the recipient is not employed prior to the administration of said allogeneic mesenchymal stem cells to said human recipient.

- 12. (Currently Amended) The method of claim 11, wherein the allogeneic human mesenchymal stem cells are recovered from human bone marrow and are administered to the human recipient in a cell preparation that is substantially free of blood cells.
- 13. (Currently Amended) The method of claim 4112, wherein the cell preparation is administered in conjunction with a carrier for the cell preparation.
- 14. (Currently Amended) The method of claim 13, wherein the preparation is administered systemically.
- 15. (Currently Amended) The method of claim 13, wherein the preparation is allogeneic mesenchymal stem cells are administered intravenously.
- 16. (Currently Amended) The method of claim 11, wherein the allogeneic human mesenchymal stem cells express incorporated genetic material of interest.

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17. (Currently Amended) A method of promoting connective tissue implantation in a recipient mammal comprising the steps of adhering allogeneic mesenchymal stem or progenitor cells onto the connective <u>tissue</u> surface of a prosthetic device and implanting into a <u>the</u> recipient mammal the prosthetic device containing these mesenchymal cells under conditions suitable for differentiating the <u>stem</u> cells into the type of connective tissue needed for implantation and wherein said allogeneic mesenchymal stem or progenitor cells are obtained from a mammalian donor and wherein a step of MHC matching of said mammalian donor to a recipient is not employed prior to the administration of said allogeneic mesenchymal stem cells to a mammalian recipient.

- 18. (Currently Amended) The method of claim 17, wherein said recipient mammal is a human patient.
- 19. (Currently Amended) The method of claim 17, wherein said mesenchymal stem cells are human mesenchymal stem cells.

Please add the following new claim:

20. (New) The method of claim 11 wherein said direct injection is direct injection into said muscle tissue.